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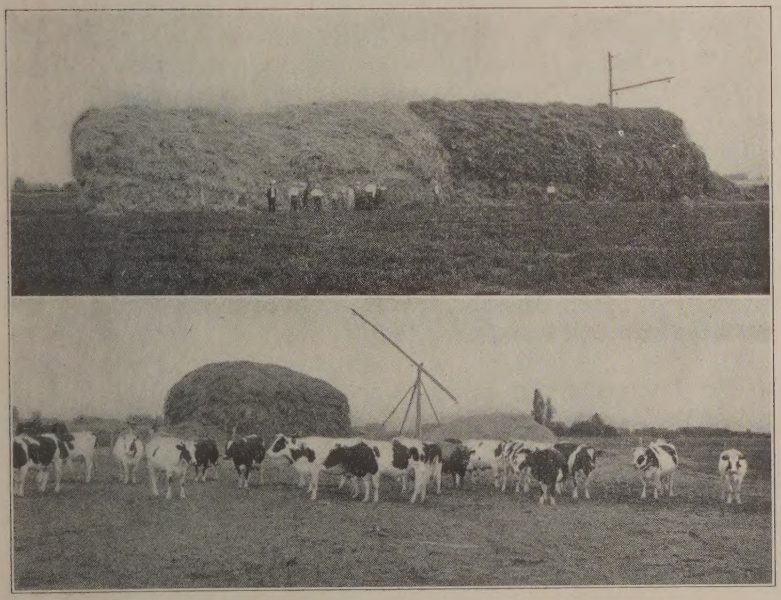
UNIVERSITY OF IDAHO
COLLEGE OF AGRICULTURE
EXTENSION DIVISION
E. J. IDDINGS
DIRECTOR

Suggestions for Profitable Dairying

By

D. L. FOURT *and* F. W. ATKESON



Idaho Alfalfa Hay and Dairy Cows Are Good Business Partners

COOPERATIVE EXTENSION SERVICE IN AGRICULTURE AND HOME ECONOMICS OF THE STATE OF IDAHO UNIVERSITY OF IDAHO COLLEGE OF AGRICULTURE AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

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FOREWORD

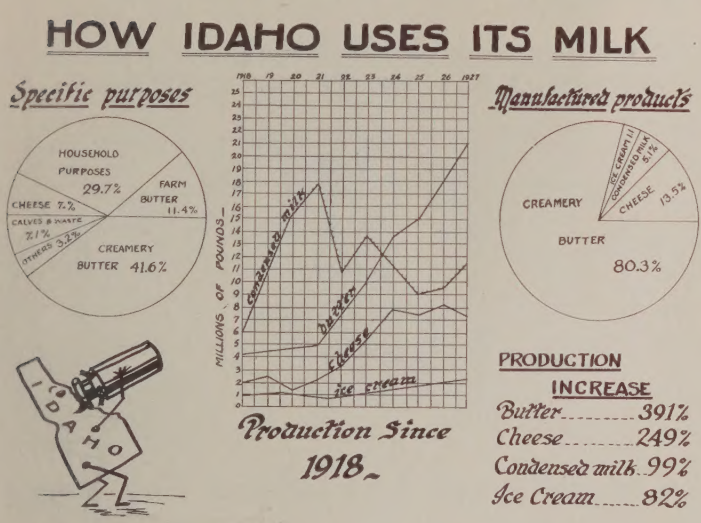
THE MATERIAL presented in this bulletin was prepared as exhibits for the dairy demonstration train run through southern Idaho in July, 1928. The purpose is to furnish interested farmers material of the exhibits for further study.

The Idaho dairy demonstration train was a cooperative enterprise between the Union Pacific Railroad and the University of Idaho College of Agriculture. The Idaho State Department of Agriculture assisted. The following national breed associations gave valuable assistance through their western representatives: American Jersey Cattle Club, American Guernsey Cattle Club, and the Holstein-Friesian Association of America. The following furnished exhibit cattle: S. W. High, New Plymouth, two Jersey cows; L. R. Wilfong, Emmett, one Jersey cow; Ira W. Blankenship, Emmett, one Jersey cow; R. M. Sherwood, Emmett, one Jersey cow; Mrs. Minnie W. Miller, Wendell, one Guernsey cow; Harry Knowlton, Sweet, one Guernsey bull; L. K. Saum, Emmett, one Ayrshire cow; University of Idaho, Moscow, two Holstein cows, one Holstein bull, one Jersey cow and one Jersey bull.

The Intermountain Dairy Supply Company, Salt Lake City, furnished stall equipment for one car. County agricultural agents and the newspapers of the state contributed greatly to the success of the train. Many other agencies and individuals cooperated to make this demonstration train a success.

Purpose of Train

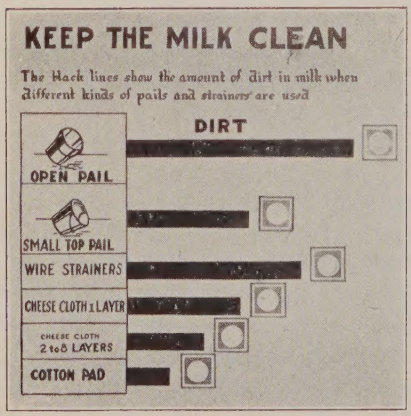
THE TRAIN visited all the irrigated valleys tributary to the Snake River served by the Union Pacific. The central thought back of all exhibits was more profitable dairying through greater efficiency in operation. It was believed that profitable dairying in such a favorable region would bring expansion as fast as advisable.



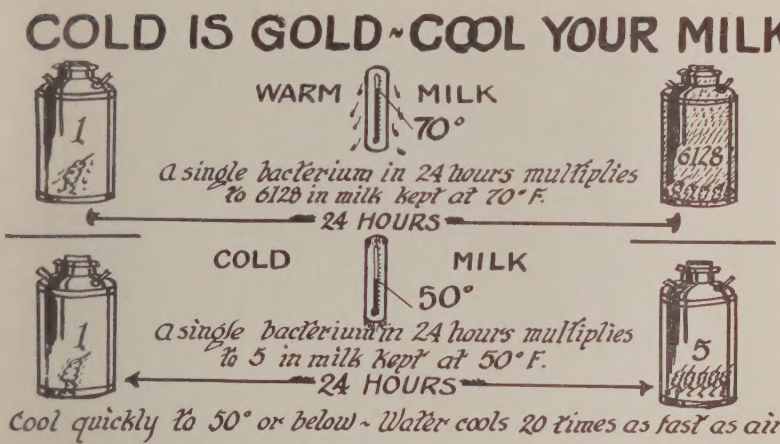
Quality is Supreme

THE DAIRY industry has grown during the past ten years into one of Idaho's most important industries. Ten years ago Idaho was importing dairy products. Now she exports large quantities and is in competition with other states for the sale of her surpluses. California, particularly Los Angeles, is the primary market for Idaho dairy products. The future expansion of the dairy industry in this state will depend upon whether or not Idaho can successfully compete with other states in economy of production and quality of products. Idaho has more favorable conditions, such as feed and climate, than many of the other states with larger dairy industries; and if the dairy farmers of Idaho will use efficient methods in production they will be able to compete successfully with other areas in cost of production. However, economical production is not all that is necessary. High quality products must be produced in order to find a ready market in competition with other sections.

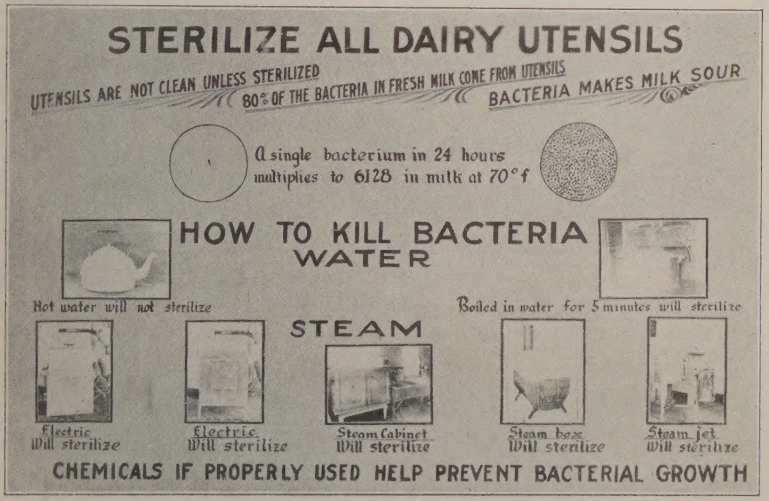
Basis of Quality Is Clean Milk

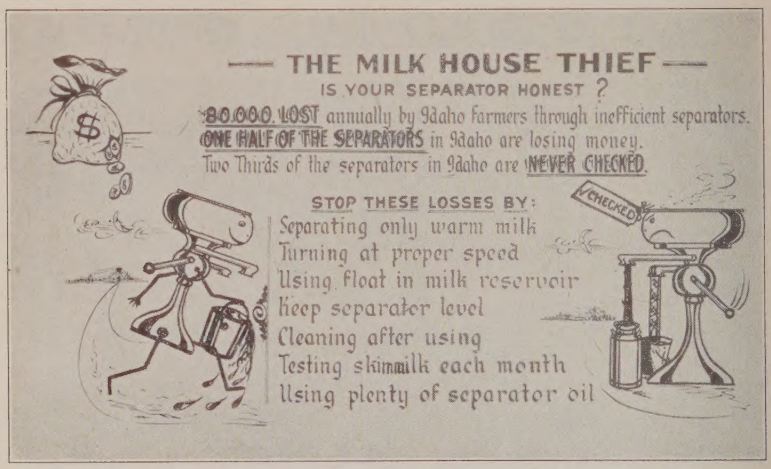

KEEP THE MILK CLEAN
The black lines show the amount of dirt in milk when different kinds of pails and strainers are used
DIRT
OPEN PAIL
SMALL TOP PAIL
WIRE STRAINERS
CHEESE CLOTH 1 LAYER
CHEESE CLOTH 2 to 8 LAYERS
COTTON PAD

THE BASIS of high quality dairy products, whether it be butter, cheese, evaporated milk, or any other manufactured product, is clean milk. Clean cows, clean milkers, clean barns, small top milk pails, sterilized utensils, and an absorbent cotton strainer pad will get results.

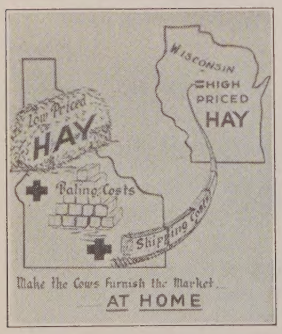

COLD IS GOLD~COOL YOUR MILK
WARM MILK
70°
A single bacterium in 24 hours multiplies to 6128 in milk kept at 70° F.
1
6128
24 HOURS
COLD MILK
50°
A single bacterium in 24 hours multiplies to 5 in milk kept at 50° F.
1
5
24 HOURS
Cool quickly to 50° or below ~ Water cools 20 times as fast as air

QUICK COOLING of milk keeps down bacterial development and makes possible better quality of manufactured products. Cool the milk to 50° F. within two hours. Stirring the milk while cooling increases the cooling process many fold. Utensils are some of the greatest source of milk contamination. Sterile utensils are essential.


STERILIZE ALL DAIRY UTENSILS
UTENSILS ARE NOT CLEAN UNLESS STERILIZED
80% OF THE BACTERIA IN FRESH MILK COME FROM UTENSILS
BACTERIA MAKES MILK SOUR
A single bacterium in 24 hours multiplies to 6128 in milk at 70°f
HOW TO KILL BACTERIA
WATER
Hot water will not sterilize
Boiled in water for 5 minutes will sterilize
STEAM
Electric Will sterilize
Electric Will sterilize
Steam Cabinet Will sterilize
Steam box Will sterilize
Steam jet Will sterilize
CHEMICALS IF PROPERLY USED HELP PREVENT BACTERIAL GROWTH


— THE MILK HOUSE THIEF —
IS YOUR SEPARATOR HONEST ?
$0,000,000 LOST annually by Idaho farmers through inefficient separators.
ONE HALF OF THE SEPARATORS in Idaho are losing money.
Two Thirds of the separators in Idaho are NEVER CHECKED.
STOP THESE LOSSES BY:
Separating only warm milk
Turning at proper speed
Using float in milk reservoir
Keep separator level
Cleaning after using
Testing skimmilk each month
Using plenty of separator oil
CHECKED

Idaho's Nearest Feed Market Is the Dairy Cow



DAIRYING affords a most effective way of marketing the large surpluses of feed on Idaho's irrigated farms. Shipment of the feed crops themselves is almost prohibited by their bulk and by the expense of transportation. Forty cars of hay can be condensed into one car of butter. The value of a car of hay would be less than $200 while the value of a car of butter would be about $9,000. The freight rate on $1,000 worth of butter would be only six per cent of the freight on the same value of hay. Idaho's distance from market demands condensed products of high unit value.

HEAVY YIELDING FEED CROPS + HIGH PRODUCING DAIRY COWS = MORE MILK PER ACRE
Dairy Profits Depend on -
More Milk per Acre
More Milk per Man
More Milk per $ Invested
40 CARS OF HAY
THE HERD
Butter
ONE CAR BUTTER
Feed Your Cows From Within Your own Fenceline

How to Feed for Profit

ECONOMICAL production requires the judicious selection of home grown feeds in the proper mixtures and in correct ratio to production. Feeding in the irrigated sections of Idaho where there is an abundance of low priced alfalfa hay calls for a different schedule than other areas.

When alfalfa hay is the only roughage, feed one of the following mixtures in these proportions:

Mixtures	*By Wt.*	*Daily Production*
I		
Barley or Corn	3 parts	Less than 1 lb. fat: No Grain
Bran	1 part	
II		1 to 1½ lbs. fat: 1 lb. grain per 5.5 lbs. high test milk; 1 lb. grain per 7.0 lbs. low test milk
Barley or Corn	4 parts	
Oats	1 part	1½ to 2 lbs fat: 1 lb. grain per 4.0 lbs high test milk; 1 lb. grain per 5.0 low test milk
Bran	1 part	
III		Above 2 lbs. fat: 1 lb. grain per 3.0 lbs. high test milk; 1 lb. grain per 4.0 lbs low test milk
Corn & Cob meal	2 parts	
Oats	1 part	
Bran	1 part	

When alfalfa hay is supplemented with silage, wet beet pulp, or potatoes, feed one of the following mixtures in these proportions:

Mixtures	*By Wt.*	*Daily Production*
I		
Barley or Corn	1 part	Less than 1 lb. fat: No Grain
Oats	1 part	
Bran	1 part	
II		1 to 1½ lbs. fat: 1 lb. grain per 4.0 lbs. high test milk; 1 lb. grain per 5.0 lbs. low test milk
Wheat	1 part	
Oats	1 part	1½ or more lbs. fat: 1 lb. grain per 3.0 lbs. high test milk; 1 lb. grain per 4.0 lbs. low test milk
Bran	1 part	
III		
Barley or Corn	4 parts	
Oats	2 parts	
Oilmeal	1 part	
IV		
Barley or Corn	1 part	
Bran	1 part	
V		
Barley	1 part	
Oats	1 part	

NOTE: Substitute molasses for barley pound for pound.

Summer Suggestions

- More milk per acre from good pasture, than any other feed
- Pasture grasses grow less in late summer—supplemental feeds are necessary
- Feed alfalfa hay once daily
- Heavy producing cows should have grain
- Feed minerals while cows are on pasture

Tonics and Patent Medicines

- Healthy cows do not need tonics
- Sick cows need specific medicines
- Tonic feeds cost too much and have little value
- Call a graduate veterinarian for sick cows

Commercial Feeds

Ready-mixed feeds no better except greater variety

Some mixed feeds good, some very poor

Value depends on:

1. Digestible nutrient content
2. Cost per pound of nutrients
3. Kind and quality of ingredients
4. Adaptability of feed to community
5. Performance record

Proprietory mixed feeds not recommended except for very high producing cows

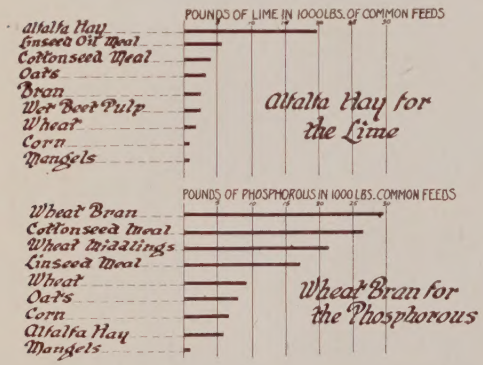
By-Products

Dairy cows convert low value by-products into valuable products

Cash in on Idaho's waste feeds by feeding to dairy cows

Convert:

Cull potatoes
Wet beet pulp
Beet molasses
Cannery wastes
Apple pomace
Bean and pea by-products
—Into dairy products



MINERALS HAVE A DEFINITE FUNCTION IN NUTRITION

THEY ARE NOT A CURE-ALL FOR ALL TROUBLES

THEY ARE NOT A SUBSTITUTE FOR OTHER FEEDS

Minerals Liable to Be Deficient

Salt, Iodine, Calcium (lime), Phosphorous

Guard against goitre in calves

Feed iodized salt regularly or feed solution of 15 grains of potassium iodine in 1 oz. of water on grain once each week, last 3 months of pregnancy

When and What Minerals Are Needed

Low producing cows probably do not need minerals unless they have depraved appetites indicated by eating bones, dirt, etc.

High producing cows may need minerals

Alfalfa hay usually furnishes sufficient lime

Wheat bran is a good source of phosphorous

In southern Idaho phosphorous is more often deficient than lime

Commercial Mineral Mixtures

1. Usually cost too much
2. Often unjustifiable claims are made for them
3. Sometimes contain unessential ingredients
4. May not be adapted to region
5. No better than cheaper home mixture

Suggested Mineral Feeds—If Needed

200 lbs. sterilized bone flour or meal, or spent bone-black
100 lbs. salt
100 lbs. sterilized bone-meal
100 lbs. finely powdered limestone (non magnesian)
100 lbs. salt
(1 or 2 lbs. iodized calcium is desirable)

Mix and feed as 3% of the grain mixture. Also keep before animals at all times

Good Pastures—The Foundation of Successful Dairying

ONE-HALF of the year's feed supply is pasture but only one-fifth of the year's feed cost is pasture. Average yearly feed cost per pound of butterfat is 20 cents. Feed cost while on pasture is 8 cents per pound of butterfat.

Dairy cows will return $75.00 to $125.00 per acre on good pasture. Just open the gate and let the cows do the harvesting. Pasture is the only crop that can be harvested every day for six months.

Why not get $125.00 per acre instead of $50.00? The following table summarizes two years' results in pasture management studies at the Caldwell Substation of the University of Idaho agricultural experiment station. Field I was 8 years old and Field IV was 13 years old when the experiment started. The pastures were originally mixtures but had been abused in so many ways that they were mostly bluegrass. The cows used averaged a little less than one pound of butterfat per day.

PASTURE IS LIKE AN APPLE TREE - IT GROWS
FROM BOTH THE ROOTS AND LEAVES
Plenty of apples
Plenty but not enough leaves
Good crop
Grazed too close
THE BETTER THE PASTURE TODAY - THE MORE PASTURE TOMORROW

University of Idaho Caldwell Substation Experiments
(Old Bluegrass Pastures)

Treatment	Field I (Per Acre)				Field IV (Per Acre)			
	Light Irrigation	Light Irrigation & Cultivation	Proper Irrigation	Proper Irrigation & Cultivation	Light Irrigation	Light Irrigation & Manuring	Proper Irrigation	Proper Irrigation & Manuring
ily Carrying capacity ows)	1.19	1.02	1.42	1.39	1.15	1.45	1.35	1.71
ason Milk oduction ounds)	5,289.6	4,405.6	6,151.1	5,738.3	4,709.3	6,057.8	5,731.9	7,158.6
sture eturns ollars)	$85.27	$72.05	$106.34	$93.63	$78.02	$103.02	$96.64	$119.73

Cultivation did not pay; in fact, it reduced the returns. Top dressing of manure with light irrigation more than equaled proper irrigation. Manure and proper irrigation gave best returns. When the returns per acre can be increased from $78.03 to $119.73, it pays to study pasture management.

Pasture Is Nature's Cow Tonic

1. It helps prevent breeding troubles
2. The best way to feed minerals
3. It helps prevent mineral deficiency
4. It furnishes essential vitamines
5. It helps correct winter feeding mistakes
6. It stimulates milk flow
7. Ideal before the cow freshens

Good Management

1. Don't turn on too early in spring
2. Don't overstock the pasture
3. Divide pasture into 3 fields and use alternate grazing system
4. Don't irrigate while cattle are grazing, but irrigate well when needed
5. Keep the weeds clipped
6. Manure the pasture every fall
7. Scatter droppings of previous year in early spring

Pasture Mixtures That Have Been Successful in Idaho

Mixture Number 1

Ladino clover	4 lbs.
Orchard grass	4 lbs.
Meadow fescue	4 lbs.
Total per acre	12 lbs.

Mixture Number 2

Kentucky bluegrass	2 lbs.
Orchard grass	4 lbs.
Meadow fescue	6 lbs.
Tall oat grass	4 lbs.
Italian rye grass	4 lbs.
White sweet clover	5 lbs.
Total per acre	25 lbs.

Give Your Calf a Chance

The Danger Age

WHAT TO FEED

First 3 to 4 days with dam. Three to 14 days—6 to 10 lbs. whole milk, according to size and condition
14 to 21 days—Gradually substitute skim milk for whole milk. All hay and grain calf will consume
21 days to 4 or 6 months—10 to 20 lbs. skim milk according to age. Homegrown grain up to 2 lbs. daily. Legume hay or good pasture. Plenty of pure water and salt
6 months to 2 years—Legume hay, or good pasture. 2 lbs. homegrown grain daily. Plenty of pure water and salt

Six Months of Age Raised on Skim Milk, Grain and Hay

WHEN SKIM MILK IS SCARCE

1. 10 to 12 lbs. of skim milk to 70 days, plus plenty of good hay and grain
2. Dried buttermilk: 1 part to 9 parts warm water
3. Dried skim milk: 1 part to 9 parts warm water
4. Semi-solid buttermilk: 1 part to 3 parts warm water

Any one of these is satisfactory when fed in the same manner as skim milk

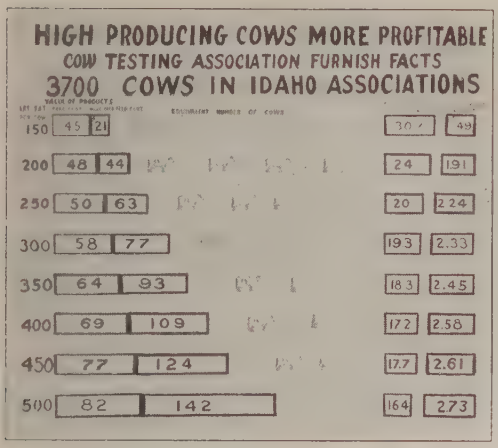
Well Grown Yearling

DO

1. Wash and sterilize buckets
2. Feed according to condition
3. Weigh milk to each calf
4. Feed calves in stanchions
5. Feed skim milk direct from separator without foam
6. Feed milk at uniform temperature
7. Keep pens clean, well ventilated and well lighted
8. Treat sickness promptly

DON'T

1. Use dirty buckets
2. Underfeed
3. Overfeed
4. Feed as groups
5. Feed sour milk
6. Feed cold milk
7. Use dirty pens
8. Neglect sickness



Do Your Cows Produce 300 Pounds of Fat Each

	Milk	Fat
Average production of all cows in Idaho	4500	180
Average production of all cow testing association cows in Idaho	7620	306
Superiority of association cows	3120	126

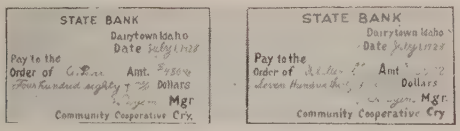
THE COW TESTING ASSOCIATION DID THIS BY:

Finding and eliminating low producing, unprofitable cows
Determining the value of bulls and saving the good cows
Stimulating improved methods of feeding and management
Developing greater interest in dairying
Checking inefficient separators
Locating and developing heifers from the best cows

Cow Testing Associations are available to every dairyman
See your Extension Agent

A Tale of Two Herds

Returns Over Feed Cost



Why the Difference?

16 Cows	Not the size of herd	6 Cows
Grade Holsteins	Not the breed	Grade Holsteins
$52.53	Not feed cost per cow	$86.23

It Was

177.6 lbs.	Average production of fat	446.6 lbs.

Note: Actual cow testing association records in the same community, the same year.

It Pays to Keep Records

Records Give Light—Why Work in the Dark?

I. Breeding records show:
   1. When to dry each cow and prepare her for next freshening
   2. The sire of each animal
   3. The age of each animal
   4. Shy breeding and sterility of each cow and the bull

II. Production records show:
   1. Profit or loss from each cow
   2. Amount to feed and when to change the ration
   3. Value of a sire through production of daughters
   4. The sale value of a cow and her calves

III. Registration, transfer and pedigree records:
   1. Assist in selling or advertising
   2. Insure confidence in purity and value of cattle
   3. Increase sale value of cattle

Your Future Herd Depends on Your Present Bull

Would you buy a 1910 model auto? The scrub bull is as out of date as the one cylinder right-hand drive.

Think This Over

A survey of 295 Idaho dairy farms showed:
Less than one-half herd bulls registered.
One-fourth were *just scrubs*
Only 43 per cent of the farmers owned bulls

Here Are Your Facts

	Cost of Bulls	Income Per Cow	Income Per Herd
Herds with registered bulls	$95.42	$92.70	$954.81
Herds with unregistered bulls	44.68	79.57	819.67
Difference	$50.74	$13.13	$135.14

A saving of $50.74 in cost of bulls lost the dairymen $135.14 yearly on each of their herds of 10.3 cows

Methods of Selecting a Herd Sire

The successful breeder considers everything

Bull's offspring—Production and type of a bull's daughters are the best guide

Pedigree—The bull's breeding qualities are influenced by characteristics of his ancestors.

Idaho Violet and Three Sons Good Type Bulls from Good Mothers Should Breed Type

Type—Breed type is essential in breeding uniform cattle of highest value

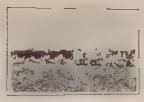
Consider not only the type of the bull but his ancestors as well

The Bull

What a Good Bull Did

What Is a Good Bull Worth?

Improvement of his daughters over their dams



His Daughters

	Lbs. Milk	Lbs. Fat	Age
12 daughters	13,243	454	2 yrs. 5 mos. 17 days
12 dams	8,526	303	2 yrs. 4 mos. 15 days
Increase (lbs.)	4,717	151	
Increase (%)	55.3%	49.8%	

151 lbs. fat×40c=$60.40 yearly per cow. $60.40×12 daughters=$724.80 yearly. $724.80×5 milking years=$3,624.00 worth of fat from 12 cows in their lifetime due to a good bull

Would You Buy a Dead Bull?

Many breeders wish they could buy back the bull that went to the butcher. Thirty-three Idaho bulls have been proved, but 18 were dead before their value was determined. *Good bulls are too valuable to be eaten.*

You Never Know—Until the Bull Is Proved

Of 33 bulls proved in Idaho

5 decreased production an average of 60 lbs. fat per cow
5 just about held their own—16 lbs. fat increase
23 increased production an average of 81 lbs. fat

Exchange bulls with your neighbors and keep both alive until their daughters freshen.

What Idaho Farmers Have Done Thru Bull Associations

	Cost of bull	Ave. size of herd	Bull cost per man	Bull cost per cow	No. of years bulls used	Bull cost per cow per yr.
Before organization	$ 82.00	10.1	$82.00	$6.09	2	$4.05
After organization	213.00	33.4	35.00	6.36	6	1.06

A Bull Association: Reduces bull costs; furnishes bulls out of record dams; standardizes breed in community; keeps bulls in service until value proved.

PLAY FAIR WITH YOUR BULL

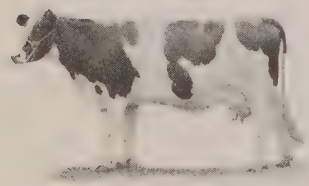
1. Give him exercise—it helps prevent sterility
2. Use large pen at least 1800 square feet. Overhead or ground cable; safe-keeper breeding chute
3. Do not use before one year old—limited service until 2 years. Allow cows only one service
4. Do not let run with cows—overworks bull and dangerous
5. Use Bell metal ring
   Jansen halter where ring is torn out of nose
   Let bull drag a 20-foot small link chain from horns or halter and through ring
6. Keep feet trimmed — lengthens usefulness of bull
7. Feed—limited amount of hay; do not allow large barrel to develop
   —limited amount of grain mixture of oats and wheat—keep in good flesh but not fat
   —salt—fresh water
   —green feed or grass occasionally

THIS IS DAISY

172 lbs. fat
Her owner milked her 600 times in a year for $28.33 over feed cost
Not so good: But see her daughter

THIS IS POLLY

470 lbs. fat
Polly's owner milked her 600 times in a year for $128.85 over feed costs
A good cow—but see her daughter by a bull association sire



THIS MOST EXPENSIVE COW IN THE WORLD

THE SCRUB PUREBRED

In one year she produced only 5,538 lbs. milk and 170 lbs. fat
Her feed cost $46.55
She made only $28.28 above feed cost
She did not pay expenses
Don't keep a scrub even though she is registered

THIS IS DAISY'S DAUGHTER

By a good registered bull—378 lbs. of fat
The same dairyman milked her 600 times also, but got $111.25 over feed cost—equal to four cows like her mother
A good bull made the difference
Why use scrubs?

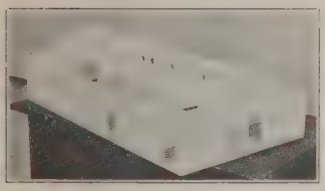
THIS IS POLLY'S DAUGHTER

691 lbs. fat
The same dairyman milked her 600 times and got $212.22 over feed costs
Good proved sires make a herd better
Don't let the profits backslide

A GREAT LOSS TO DAIRYING A STUNTED COW

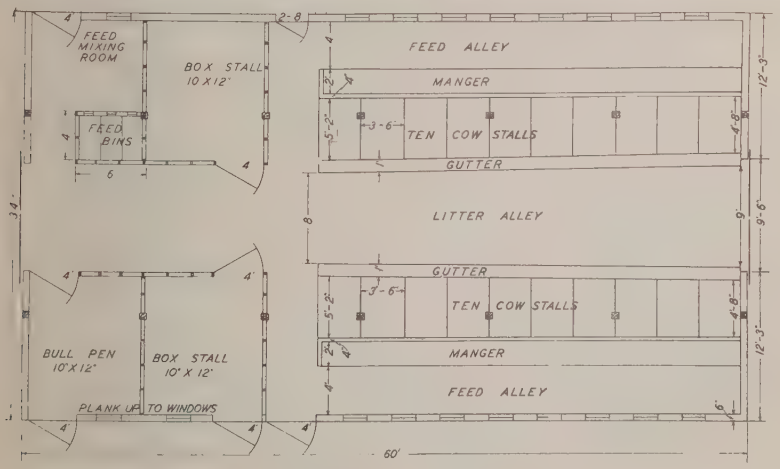
This heifer was freshened at 14 months
A boarder now
A low producer always
Breed heifers to freshen at 24 months or over

Types of Barns and Equipment Influence Overhead and Labor Requirements

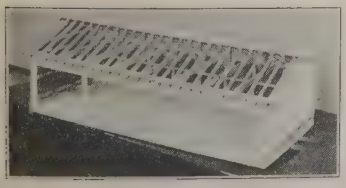


One Story Barn

LOW COST, good light, convenient, and minimum labor are some of the advantages of this milking barn. It is recommended to be used in connection with an open shed. The cows are turned in only for milking and grain feeding, then turned out into open shed. The rigid wooden stanchion is cheap and quite satisfactory when the cows are in only at milking time. If cows are kept in at night, the model stall or modified model stall is more comfortable and keeps cows cleaner.

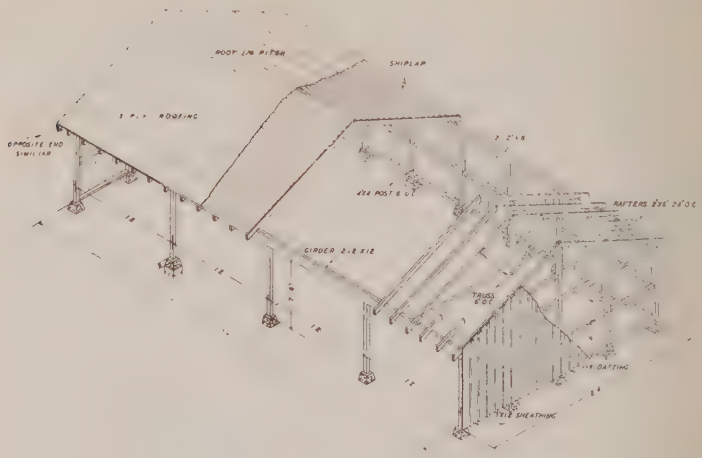


Plan for One Story Barn



Shelter Shed

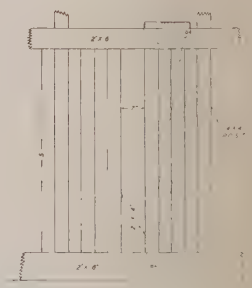
OPEN SHED keeps cows comfortable, must be bedded only two or three times a week, manure is preserved well, cows are clean, hand labor is minimized. The essential thing in building a shelter shed is to have it not too high and be sure to have it deep enough. Never less than 24 feet deep and in cold climates up to 30 feet deep.



Plan for Shelter Shed

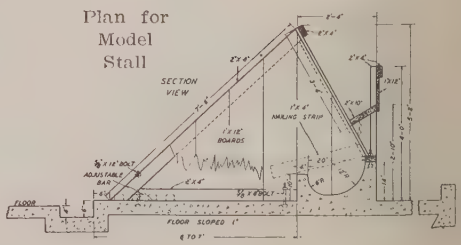
Rigid Stanchion

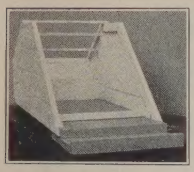
Plan for Rigid Stanchion



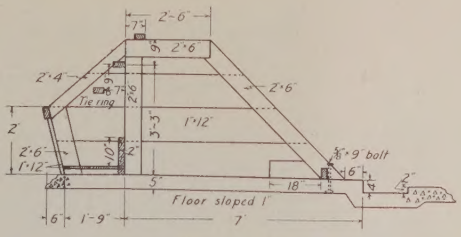
Model Stall

Plan for Model Stall



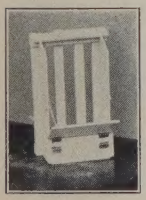


Modified Model Stall

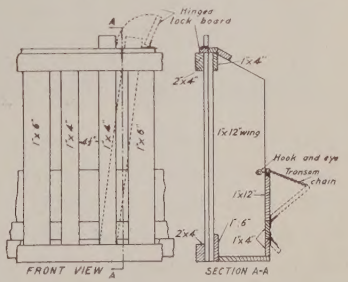


Plan for Modified Model Stall

THE MODEL stall and modified model stall are cheap, home-made, comfortable for the cows, require less bedding, keep cows clean, reduce labor in cleaning barn and cows. Recommended where cows are kept in the barn and open shed system not used.

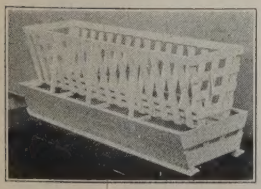


Calf Stanchion

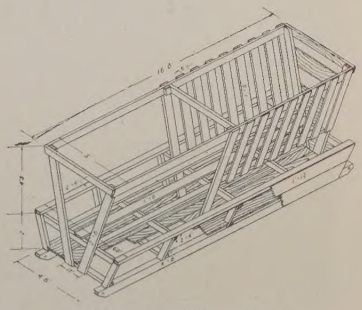


Plan for Calf Stanchion

THE MODIFIED model stall does not obstruct the light in the barn as badly as the model stall and the manger is better suited to feeding chopped hay. However, the stall partitions are not as strong as in the model stall.



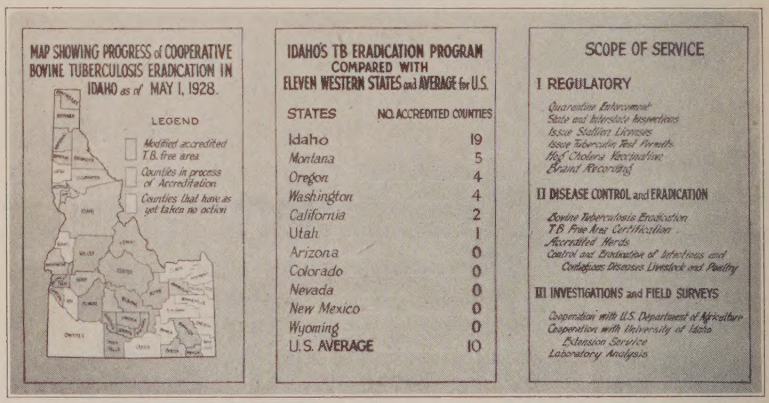
Hay Rack



Plan for Hay Rack

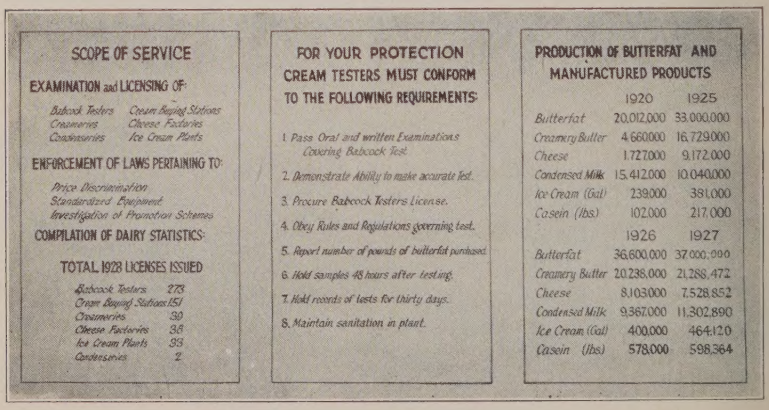
IDAHO DEPARTMENT OF AGRICULTURE

Bureau of Animal Industry


MAP SHOWING PROGRESS of COOPERATIVE BOVINE TUBERCULOSIS ERADICATION IN IDAHO as of MAY 1, 1928.
LEGEND
Modified accredited T.B. free area
Counties in process of Accreditation
Counties that have as yet taken no action
IDAHO'S TB ERADICATION PROGRAM COMPARED WITH ELEVEN WESTERN STATES and AVERAGE for U.S.
STATES NO. ACCREDITED COUNTIES
Idaho 19
Montana 5
Oregon 4
Washington 4
California 2
Utah 1
Arizona 0
Colorado 0
Nevada 0
New Mexico 0
Wyoming 0
U.S. AVERAGE 10
SCOPE OF SERVICE
I REGULATORY
Quarantine Enforcement
State and Interstate Inspections
Issue Stallion Licenses
Issue Tuberculin Test Permits
Reg. Cholera Vaccination
Brand Recording
II DISEASE CONTROL and ERADICATION
Bovine Tuberculosis Eradication
T.B. Free Area Certification
Accredited Herds
Control and Eradication of Infectious and Contagious Diseases Livestock and Poultry
III INVESTIGATIONS and FIELD SURVEYS
Cooperation with U.S. Department of Agriculture
Cooperation with University of Idaho Extension Service
Laboratory Analysis

ERADICATION of bovine tuberculosis goes hand in hand with the production of dairy products of the highest quality. Consumers of dairy products are demanding that the products they use come from tuberculin tested dairy herds. The dairymen of Idaho are fortunate that our good state ranks fifth of all the states in the union in the percentage of tuberculin tested cattle.

Bureau of Dairying


SCOPE OF SERVICE
EXAMINATION and LICENSING OF:
Babcock Testers
Creameries
Condenseries
Cream Buying Stations
Cheese Factories
Ice Cream Plants
ENFORCEMENT OF LAWS PERTAINING TO:
Price Discrimination
Standardized Equipment
Investigation of Promotion Schemes
COMPILATION OF DAIRY STATISTICS:
TOTAL 1928 LICENSES ISSUED
Babcock Testers 273
Cream Buying Stations 151
Creameries 30
Cheese Factories 36
Ice Cream Plants 33
Condenseries 2
FOR YOUR PROTECTION CREAM TESTERS MUST CONFORM TO THE FOLLOWING REQUIREMENTS:
1. Pass Oral and written Examinations Covering Babcock Test
2. Demonstrate Ability to make accurate test.
3. Procure Babcock Testers License.
4. Obey Rules and Regulations governing test.
5. Report number of pounds of butterfat purchased.
6. Hold samples 48 hours after testing.
7. Hold records of tests for thirty days.
8. Maintain sanitation in plant.
PRODUCTION OF BUTTERFAT AND MANUFACTURED PRODUCTS
1920 1925
Butterfat 20,012,000 33,000,000
Creamery Butter 4,660,000 16,729,000
Cheese 1,727,000 9,172,000
Condensed Milk 15,412,000 10,040,000
Ice Cream (Gal) 239,000 381,000
Casein (lbs.) 102,000 217,000
1926 1927
Butterfat 36,600,000 37,000,000
Creamery Butter 20,238,000 21,288,472
Cheese 8,103,000 7,528,852
Condensed Milk 9,367,000 11,302,890
Ice Cream (Gal) 400,000 464,120
Casein (lbs) 578,000 598,364

Future Dairymen

A CONSTRUCTIVE program of better dairying calls for better dairymen as well as better methods. One of the surest ways of developing high class dairymen for Idaho is by training the boys and girls in 4-H clubs.

Pointers for Profit

1. Produce high quality products
2. Stop separator losses
3. Make the cows furnish the market for homegrown feeds
4. Reduce shipping costs by converting bulky feeds into concentrated dairy products
5. Feed grain according to milk production
6. Utilize waste by-products
7. Well managed pastures give big returns per acre
8. Well bred calves make profitable cows
9. Cow testing associations tell which cows are profitable and make possible intelligent culling
10. Herd improvement best obtained through high class bulls
11. Proved sires are the surest method of herd improvement
12. Keep down overhead and labor requirements by proper selection of barns and equipment

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